

Indeed, as a general proposition, encryption protocols both weak and strong are known in modern computer science. What is especially new and unobvious is their particular application here — and their mode of use — in the context of gaming. For these reasons the undersigned interprets the Section 112 rejection set forth in the Official Action as based upon an objection that the application does not illustrate the invention as claimed.

For this reason the Applicant submits herewith a revised Fig. 7 in which the questioned step has been inserted at the point indicated in the claim. No new matter has been added, as in fact the drawing is merely conformed to the claim.

In addition the specification text has been revised to conform it, too, to the claim language and to the newly amended drawing. Here as well the amendment adds no new matter.

Section 103 rejections

In the Official Action it is further said that claims 26 and 27 are obvious over a combination of the Aiello '307 and '928 patents. Those patents, however, even in combination fail to teach Applicant's continuously changing deterministic signal — and anyway are not in the same art as the present invention.

In the Official Action it is proposed that Aiello '928 supplies a pseudorandom generator "having timing feature (e.g., see Fig. 3) for continuo[us] function." With respect, this assertion is in error.

First, the timing clock 370 in Fig. 3 of Aiello '928 is not for the purpose of providing a continuously changing encryption-base signal as in Applicant's claimed invention, but

rather merely is for outputting the various bits at appropriate times. Aiello says this — not only once but twice! — at his column 8, lines 3 through 7.

Second, although the Official Action suggests by use of the abbreviation "e.g." that Aiello's Fig. 3 is only just one example of a "timing feature . . . for continuo[us] function", in truth that is the only one of Aiello's drawings that includes a timer. Accordingly Aiello '928 fails to teach Applicant's continuously changing signal; and the combination of the two Aiello patents — even if it were a proper combination — would fail to make Applicant's claimed invention obvious.

Even apart from that, the cited Aiello patents are not properly combined, and in fact neither of them is even properly in this case. The present application is entitled "UNIVERSAL GAMING ENGINE (emphasis added), and begins with these words:

"Field of the Invention. The present invention relates, in general, to gaming machines, and, more particularly, to an electronic gaming engine supporting multiple games and multiple users." (page 1, lines 3 through 7, emphasis added)

The word "gaming", "games", "game" or "play" occurs ten times on page 1 alone.

Aiello and his coinventors, on the other hand, are assignees to — and most probably employees of — Bell Communications Research, Inc. Bell Research obviously is interested in problems of secure transmission and cryptography — and all the high-level mathematics and computer systems that go with such work.

This is substantiated by considering Aiello '307 at, *inter alia*, column 2, lines 15 through 30. In that passage, Aiello discusses not only authentication for secure communica-

tions but also use of encryption to "distribute independent random bits to each of the processes in a parallel or distributed computation."

In this regard the kinds of processes Aiello has in mind are not gaming processes but rather, as he says, "simulations in engineering and scientific applications" (column 2, lines 38 through 42). The high-level information theory (column 2, line 33) which is the very fabric of Aiello's work and life was outside the knowledge of the gaming art at the time of the present invention.

At the time of filing of the parent case, and to a large extent even today, people of ordinary skill in the gaming art were unschooled in computer science for the most part — and in the cryptographic art almost entirely. A person of ordinary skill designing a gaming system therefore would not look to Aiello.

Thus both Aiello patents are nonanalogous art. For that reason — as well as the failure of those patents to teach the Applicant's recited continuously varying signal for encryption and use in forming pseudorandom numbers — the Applicant respectfully asks that the rejections based on those patents be withdrawn.

Before the CAFC's notorious decision in *Festo*, a simple resolution of the nonanalogous-art issue presented by the Aiello patents would have been amendment to recite explicitly in the claims that the invention is in the field of gaming, and thereby distinguish Aiello. As the Examiners know, however, under *Festo* any such amendment would destroy entirely the Doctrine of Equivalents with respect to Applicant's claims.

Such a result would be wholly unfair to the Applicant, since the sweep of the Applicant's claims is plainly limited to the gaming field without amendment. Even if that were not

so based exclusively on the unequivocal statements of the field of the invention appearing at the head of the specification, it is surely so as a matter of File-Wrapper Estoppel based on the present comments.

Therefore the Applicant respectfully asks that the non-analogous-art character of the cited references be recognized on the basis of both, in combination: (a) the field-of-invention statements in the specification and (b) the estoppel arising from these remarks. In addition, Applicant respectfully reserves the right to swear back of Aiello.

Conclusion

In view of the foregoing amendments and remarks, Applicant respectfully requests the Examiner's favorable reconsideration and allowance of all the claims now standing in this case.

It is respectfully requested that, should there appear any further obstacle to allowance of the claims herein, the Examiner telephone the undersigned attorney to try to resolve the obstacle.

Respectfully submitted,



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